Zoom Poll Viewer
Design Class Diagram (DCD)

GUI

-zpv: ZoomPollViewer
-left_frame: Frame
-sm_unmatched_frame: Frame
-treeview_session: Treeview
-sm_middle_button: Button
-tab_controller: Tabs
-button_poll_report: Button
-export_label: Boolean
-button_answer_keys: Button
-button_bys: Button
-sm_bys_list: Listbox
-treeview_poll: Treeview
-right_frame_top: Frame
-root: Tkinter
-answer_key_label: Label
-button_run: Button
-sm: Tkinter
-sm_middle_exit_button: Button
-tab_polls: Tabs
-sm_unmatched_list: Treeview
-button_answer_key: Button
-frame_title: Label
-poll_report_label: Label
-button_export: Button
-process_label: Label
-tab_sessions: Tabs
-sm_bys_frame: Frame
-sm_middle_frame: Frame
-tab_students: Tabs
-bys_label: Label
-treeview_student: Treeview
-sm_unmatched_label: Label
-sm_bys_label: Label
-button_poll_reports: Button
-right_frame_bottom: Frame

+GUI(zpv)
+insert_tab_controller()
+insert_student_list()
+insert_student(data)
+insert_session_list()
+insert_session(data)
+insert_poll_list()
+insert_poll(data)
+insert_buttons()
+import_bys()
+import_answer_key()
+import_answer_keys()
+import_poll_report()
+import_poll_reports()
+run_metrics_calculator()
+run_metrics_calculator_after_match()
+update_lists()
+update_student_list()
+update_poll_list()
+update_session_list()
+student_matcher()
+match_completed()
+insert_all_unmatched_student()
+match_selected_students()

Logger

-formatter: String
-fh: String
-logger: Logging

+Logger(text1,text2)

Importer

-zpv: ZoomPollViewer

+Importer(zpv)
+import_bys(file_path)
+import_answer_key(file_path)
+import_poll_report(file_path)
+get_paths(file_path, file_types)
+control_student(full_name, email, session, poll, row)

Exporter

-zpv: ZoomPollViewer
-path: String
-xlsxpage: String
-xlsx_file: File
-chart: String
-xls_cell_format: String

+Eporter(zpv)
+create_xlsx(name)
+create_xlsx_page(name)
+write_xlsx_page_data(col, row, data)
+write_xlsx_page_data_title(col, row, data)
+write_xlsx_page_chart(self, col, row, data)
+close_xlsx()
+export_global()

Session

-zpv: ZoomPollViewer
-date_time: Datetime
-date_text: String
-attendance: Integer
-polls: Poll[ ]

+Session(zpv, date_time_object)
+get_date_time()
+get_date_text()
+get_polls()
+get_attendance()
+get_date_formatted()
+add_poll(poll)
+get_absent()
+get_number_of_polls()
+set_attendance(attendance)
+get_attendance_percentage()
+calculate_average_grade()

ZoomPollViewer

-is_logger_active: Boolean
-import_completed: Boolean
-students: Student[ ]
-sessions: Session[]
-GUI: GUI
-file_name_date_format: String
-date_time_format: String
-polls: Poll[ ]

+ZoomPollViewer()
+get_student(full_name, email)
+get_sessions()
+get_student_by_id(bys_id)
+get_student_by_email(email)
+get_poll_by_question(question_text)
+get_poll_by_name(poll_name, poll_type)
+get_session(date_time_text)
+get_number_of_students()
+get_number_of_sessions()
+add_student(firstname, middlename, surname, student_id)
+add_session(date_time_text)
+add_poll(poll_name, poll_type)
+check_student_email(email)
+metrics_calculator()
+student_metrics_calculator()
+session_metrics_calculator()
+poll_metrics_calculator()
+add_temporary_student(full_name, email)
+get_unmatched_temporary_students()
+get_unmatched_bys_students()
+match_students(bys_id, email)
+check_unmatched_student_exist()

Student

-zpv: ZoomPollViewer
-attended_sessions: Integer
-middle_name: String
-email: String
-temporary: Boolean
-student_id: Integer
-last_name: String
-first_name: String
-grades: Integer[ ]
-responses: Response[ ]

+Student(zpv, first_name, mid_name, last_name, student_id, temporary)
+get_first_name()
+get_middle_name()
+get_last_name()
+get_name()
+get_email()
+get_student_id()
+get_responses()
+get_temporary_state()
+get_response_by_session_and_poll(session, poll)
+get_attendance()
+get_absent()
+get_attendance_percentage()
+get_average_grade()
+set_email(email)
+add_response(session, poll)
+add_session_attendance(session)
+calculate_grades()

Poll

-zpv: ZoomPollViewer
-name: String
-number_of_students: Integer
-number_of_questions: Integer
-type: String
-questions:Question[ ]
-session_grades: Integer[ ]

+Poll(self, zpv, poll_name, poll_type)
+get_name()
+get_type()
+get_questions
+get_question(question_text)
+get_number_of_questions()
+get_number_of_students()
+add_question(question_text)
+set_session_grades(session, grades)
+get_grades_of_seesion(session)
+set_session_number_of_students(session, students)
+calculate_session_average_grade()

Question

-poll: Poll
-text: String
-choices: Choice[ ]

+Question(poll, question_text)
+get_text()
+get_choices()
+get_correct_choices()
+get_choice(choice_text)
+add_choice(choice_text, correctness=0)

Choice

-correctness: Boolean
-question: Question
-text: String

+Choice(question, text, +correctness=0)
+get_text()
+get_correctness()
-set_correct()

Response

-poll: Poll
-student: Student
-grade: Integer
-session: Session
-answers: Poll[Question[Choice[ ]]]

+Response(student, session, poll)
+get_student()
+get_session()
+get_poll()
+add_answer(question_text, answer_texts)
+get_grade()
+calculate_grade()